

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A force or pressure sensor, comprising:
a substantially rigid, mechanical-load resistant frame,
a flexible diaphragm secured over its peripheral rim to the frame, and
a piezoelectric ceramic sensor diaphragm applied to the surface of the flexible diaphragm, and

a substantially rigid cover for loading the sensor diaphragm and capable of carrying mechanical loading of more than 50 kg, wherein the cover includes a protrusion or shoulder bearing against a middle section of the flexible diaphragm and thus, by deflection, prestressing the flexible diaphragm and the piezoelectric ceramic sensor diaphragm attached thereto, and

wherein the frame and the cover define therebetween a closed housing chamber, the flexible diaphragm and the piezoelectric ceramic sensor diaphragm being located thereinside,

wherein the frame, the cover and the diaphragms are rotationally symmetrical relative to the cover protrusion or shoulder and a sensor-signal transmitting ~~contact~~ spring conductor is provided in contact with the sensor diaphragm opposite to the cover protrusion or shoulder.

2. (Cancel)

3. (Previously Presented) The sensor of claim 1, wherein the flexible diaphragm is made of metal and has a peripheral rim secured between the edges of the frame and the cover.

4. (Previously Presented) The sensor of claim 1, wherein the piezoelectric ceramic sensor diaphragm comprises a piezoceramic diaphragm having a diameter smaller than that of the flexible diaphragm, and the piezoceramic sensor diaphragm has a peripheral rim at a distance from an inner periphery of the housing chamber.

5. (Cancel)

6. (Previously Presented) The sensor of claim 1, wherein an amplifier and a circuit board are located in said housing chamber.

7. (Previously Presented) The sensor of claim 1, wherein the frame and the cover comprise elements in the shape of bodies of revolution.

8. (Cancel)

9. (Previously Presented) The sensor of claim 6, wherein the amplifier has its input impedance matched to provide a desired settling time of the amplifier's output, during which the amplifier has its output set substantially to zero, while the loading applied to the cover respectively remains essentially unchanged.

10. (Previously Presented) The sensor of claim 1, wherein the closed housing chamber is hermetically sealed.

11. (Previously Presented) The sensor of claim 1, wherein the cover is provided with an adapter element, which enables loading of the cover with changes in a fluid or gas pressure.

12. (Cancel)

13. (Cancel)

14. (Cancel)